CLAIMS:

1. A method for mounting a tire to a wheel rim comprising the following steps:

a) Providing a wheel rim (1) having a predetermined wheel rim imbalance and having a specifically designed location (3) for accommodating a functional element (10, 11, 12), wherein the magnitude of imbalance of the wheel rim is within a predetermined tolerance range around a predetermined target value at a position of the wheel rim which lies opposite to the location (3) for accommodating a functional element (10, 11, 12);

b) providing a tire (2) having a predetermined tire imbalance, the tire having a tire marking such that the position and magnitude of the tire imbalance can be recognized from it;

c) providing a counterbalancing weight element (20, 21, 22) which is designed such that it can be attached at the location (3) for accommodating a functional element (10, 11, 12) and which is designed such that, after having been attached to the wheel rim (1) at the location (3) for accommodating a functional element (10, 11, 12) provides the wheel rim (1) in a ready-to-use condition with an imbalance of a magnitude, within a predetermined tolerance range, which corresponds to the imbalance of the tire (2);

d) attaching the counterbalancing weight element (20, 21, 22) at the location (3) for accommodating the functional element (10, 11, 12) and mounting the tire (2) to the wheel rim (1) in such a positional relation with respect to the wheel rim (1) that the position of the imbalance of the tire (2) lies opposite to the location (3) for accommodating a functional element (10, 11, 12) so that after mounting of the tire (2) to the wheel rim (1) the magnitude of imbalance of the wheel ready to be driven is below a predetermined threshold value.

2. The method according to claim 1, characterized in that the location (3) for accommodating a functional element (10, 11, 12) is the bore for accommodating a valve.

3. The method according to claim 2, characterized in that the counterbalancing weight element (20) is attached to the valve bore (3) via screwed fastening (30).

4. The method according to claim 3, characterized in that a hollow-core screw (30) is used to attach the counterbalancing weight element (20) to the valve bore (3).

5. The method according to claims 3 or 4, characterized in that the counterbalancing weight element (20) is screwed to the valve (10)

6. The method according to claim 2, characterized in that the counterbalancing weight element (22) is integrally attached to the valve (12).

7. The method according to claim 2, characterized in that the counterbalancing weight element (21) is attached to the valve bore (3) via a clip connection (31).

8. The method according to claim 7, characterized in that the clip connection for attaching the counterbalancing weight element to the valve bore also serves to fix the valve to the valve bore.

9. The method according to any of claims 2 to 8, characterized in that the fastening of the counterbalancing weight element to the valve bore is effected in functional unity with the fastening of a sensor element of a tire pressure monitoring system.

10. The method according to claim 1, characterized in that the location for accommodating a functional element is the location where a sensor element of a tire pressure monitoring system is attached.

11. The method according to claims 9 or 10, characterized in that the counterbalancing weight element is attached to the sensor element of the tire pressure monitoring system.

12. The method according to claim 11, characterized in that the counterbalancing weight element is integrally formed with the sensor element of the tire pressure monitoring system.

13. The method according to claims 10 to 12, characterized in that the sensor element of the tire pressure monitoring system does not have a function and is designed as a dummy.

14. The method according to claims 1 to 8, characterized in that the predetermined target value is selected such that the magnitude of the total imbalance of the wheel rim is zero if the valve is mounted in a ready for use condition.

15. The method according to any of claims 1 to 14, characterized in that the predetermined target value is selected such that the magnitude of the total imbalance of the wheel rim is zero if the valve and the sensor of the tire pressure monitoring system are mounted in a ready-to-use condition.

16. The method according to claims 1 to 15, characterized in that the predetermined tolerance range around the target value is $\leq \pm 10$ g, preferably $\leq \pm 5$ g and most preferably $\leq \pm 2$ g.

17. The method according to any of claims 1 to 16, characterized in that the predetermined threshold value is $\leq \pm 10$ g.

18. The method according to claim 17, characterized in that the predetermined threshold value is ≤ 5 g.

19. The method according to any of the preceeding claims, characterized in that the bore (3) for accommodating a valve (10, 11, 12) is provided in the wheel rim hump.

20. A counterbalancing weight element to be attached to a wheel rim having a location (3) for accommodating a functional element (10, 11, 12) wherein due to the counterbalancing weight element (20, 21, 22) after mounting a tire (2) to the wheel rim (1) the imbalance of a wheel ready to use has a magnitude below a predetermined threshold value,

characterized in that

said counterbalancing weight element is adapted to be mounted at the location (3) for accommodating a functional element (10, 11, 12).

21. The counterbalancing weight element (20, 21, 22) according to claim 20, characterized in that the location (3) for accommodating a functional element (10, 11, 12) is the bore for accommodating a valve.

22. The counterbalancing weight element (20) according to claim 21, characterized in that it is adapted to be attached to the valve bore (3) via screwed fastening (30).

23. The counterbalancing weight element (20) according to claim 22, characterized in that it is adapted to be attached to the valve bore (3) via a hollow-core screw (30).

24. The counterbalancing weight element (20) according to claim 22 or 23, characterized in that it is adapted to be screwed to a valve (10) inserted in the valve bore (3).

25. The counterbalancing weight element (22) according to claim 21, characterized in that it is integrally formed at a valve (12) being adapted to be inserted in the valve bore.

26. The counterbalancing weight element (21) according to claim 21, characterized in that it is adapted to be fastened to the valve bore (3) via a clip connection (31).

27. The counterbalancing weight element according to claim 26, characterized in that the clip connection for fastening the counterbalancing weight element to the valve bore also serves to fix the valve in the valve bore.

28. The counterbalancing weight element according to any of claims 21 to 27, characterized in that it is adapted to be attached to the valve bore in functional unity with the fastening of a sensor element of a tire pressure monitoring system.

29. The counterbalancing weight element according to claim 20, characterized in that the location for accommodating a functional element is the area where a sensor element of a tire pressure monitoring system is attached.

30. The counterbalancing weight element according to claims 28 or 29, characterized in that it is adapted to be attached to the sensor element of a tire pressure monitoring system.

31. The counterbalancing weight element according to claim 30, characterized in that it is formed integrally with the sensor element of a tire pressure monitoring system.

32. The counterbalancing weight element according to any of claims 28 to 31, characterized in that the sensor element of the tire pressure monitoring system has no function and is designed as a dummy.